

WHAT IS CLAIMED IS:

- 1           1.       A spinal implant system, comprising:  
2                   a vertebral prosthesis having a support and an endplate, and  
3                   an artificial spinal disc coupled to the endplate.
- 1           2.       The spinal implant system of claim 1, wherein the endplate has a  
2       structure adapted to interlock with the artificial spinal disc.
- 1           3.       The spinal implant system of claim 2, wherein the structure prevents  
2       rotation of the artificial spinal disc relative to the endplate.
- 1           4.       The spinal implant system of claim 2, wherein the artificial spinal disc  
2       comprises a core disposed between two plates and wherein one of the two plates is  
3       removed prior to being coupled with the structure.
- 1           5.       The spinal implant system of claim 2, wherein the structure is at least  
2       one of a flange and a recess.
- 1           6.       The spinal implant system of claim 1, wherein the endplate and the  
2       support are adapted to be threaded, snapped, or twist-locked onto one another.
- 1           7.       The spinal implant system of claim 1, further comprising a pedicle  
2       screw retainer coupled to at least one of the endplate and the support.
- 1           8.       The spinal implant system of claim 1, wherein the support is adjustable  
2       to change the height of the support.
- 1           9.       The spinal implant system of claim 8, further comprising a second  
2       endplate coupled to the support, the second endplate adapted to be coupled to a  
3       second artificial spinal disc.
- 1           10.      The spinal implant system of claim 8, further comprising a second  
2       endplate coupled to the support, the second endplate having teeth adapted to be  
3       coupled to a bone.

1           11.     A vertebral prosthesis adapted to be implanted adjacent a spinal disc  
2     prosthesis, comprising:  
3                 a shaft;  
4                 an endplate coupled to one end of the shaft, the endplate adapted to be  
5     implanted adjacent a disc prosthesis, thereby obviating the need to fuse the endplate to  
6     an adjacent vertebra.

1           12.     The vertebral prosthesis of claim 11, further comprising a second  
2     endplate coupled to an other end of the shaft, wherein the second endplate comprises  
3     one or more teeth configured to directly interface with an other adjacent vertebra,  
4     thereby allowing fusion of the vertebral prosthesis with the other adjacent vertebra  
5     while preserving motion between the vertebral prosthesis and the adjacent vertebra.

1           13.     The vertebral prosthesis of claim 11, further comprising a second  
2     endplate, wherein the second endplate is adapted to be implanted adjacent a second  
3     disc prosthesis.

1           14.     The vertebral prosthesis of claim 11, wherein the disc prosthesis  
2     comprises a core held between two plates and wherein one of the two plates is  
3     removed prior to being implanted adjacent the endplate.

1           15.     The vertebral prosthesis of claim 11, wherein the endplate and the shaft  
2     are adapted to be screwed, threaded, snapped, or twist-locked onto one another.

1           16.     The vertebral prosthesis of claim 11, further comprising a pedicle  
2     screw retainer coupled to at least one of the shaft and the endplate.

1           17.     The vertebral prosthesis of claim 11, wherein the height of the shaft is  
2     adjustable.

1           18.     The vertebral prosthesis of claim 11, wherein the shaft is at least  
2     partially constructed of a mesh.

1            19.     The vertebral prosthesis of claim 18, wherein the disc prosthesis  
2     comprises a core situated between two plates and wherein one of the two plates is  
3     removed prior to being inserted into the recess.

1            20.     The vertebral prosthesis of claim 19, further comprising a pedicle  
2     screw retainer coupled to at least one of the shaft and the endplate.

1            21.     A vertebral prosthesis, comprising:  
2                     a shaft;  
3                     a first endplate coupled to a first end of the shaft, the first endplate  
4     having a recess adapted to receive an artificial spinal disc; and  
5                     a second endplate coupled to a second end of the shaft.

1            22.     The vertebral prosthesis of claim 21, wherein the second endplate  
2     comprises one or more teeth configured to interface with an adjacent vertebra.

1            23.     The vertebral prosthesis of claim 21, wherein the second endplate has a  
2     second recess adapted to receive a second artificial spinal disc.

1            24.     The vertebral prosthesis of claim 21, wherein the artificial spinal disc  
2     comprises a core situated between two plates and wherein one of the two plates is  
3     removed prior to the disc being inserted into the recess.

1            25.     The vertebral prosthesis of claim 21, wherein the first endplate and the  
2     shaft are adapted to be screwed, threaded, snapped, or twist-locked onto one another.

1            26.     The vertebral prosthesis of claim 21, further comprising a pedicle  
2     screw retainer coupled to at least one of the shaft, the first endplate, and the second  
3     endplate.

1            27.     The vertebral prosthesis of claim 21, wherein the shaft is adjustable to  
2     change the height of the shaft.

1           28.     The vertebral prosthesis of claim 21, wherein the shaft is at least  
2     partially constructed of a mesh.

1           29.     The vertebral prosthesis of claim 21, wherein the recess prevents  
2     rotation of the artificial spinal disc relative to the first endplate.

1           30.     The vertebral prosthesis of claim 29, wherein the second endplate has a  
2     second recess adapted to receive a second artificial spinal disc.

1           31.     The vertebral prosthesis of claim 30, further comprising a pedicle  
2     screw retainer coupled to at least one of the shaft and the endplate.

1           32.     A vertebral prosthesis compatible with multiple disc prostheses,  
2     comprising:  
3                 a shaft;  
4                 an endplate tray coupled to the shaft, the endplate tray configured to be  
5     implanted adjacent a first artificial disc having a first shape and a second artificial disc  
6     having a second shape, wherein the first shape is different from the second shape.

1           33.     The vertebral prosthesis compatible with multiple disc prostheses of  
2     claim 32, wherein the first artificial spinal disc comprises a core between two plates  
3     and wherein one of the two plates is removed prior to being implanted adjacent the  
4     endplate tray.

1           34.     The vertebral prosthesis compatible with multiple disc prostheses of  
2     claim 32, wherein the endplate tray and the shaft are adapted to be screwed, threaded,  
3     snapped, or twist-locked onto one another.

1           35.     The vertebral prosthesis compatible with multiple disc prostheses of  
2     claim 32, further comprising a pedicle screw retainer coupled to at least one of the  
3     shaft and the endplate tray.

1           36.     The vertebral prosthesis compatible with multiple disc prostheses of  
2     claim 32, wherein the shaft is adjustable to change the height of the shaft.

1           37.     The vertebral prosthesis compatible with multiple disc prostheses of  
2 claim 32, wherein the shaft is at least partially constructed of a mesh.

1           38.     The vertebral prosthesis compatible with multiple disc prostheses of  
2 claim 32, wherein the first artificial disc is manufactured by a first manufacturer and  
3 the second artificial disc is manufactured by a second manufacturer, wherein the first  
4 manufacturer is different from the second manufacturer.

1           39.     A vertebral prosthesis system having interchangeable endplates,  
2 comprising:  
3                 a shaft;  
4                 a first endplate having a first side adapted to be coupled to a first end  
5 of the shaft and a second side dimensioned to be coupled to a first artificial disc; and  
6                 a second endplate having a first side adapted to be coupled to the first  
7 end of the shaft in place of the first endplate and a second side dimensioned to be  
8 coupled to a second artificial disc, the second artificial disc having a different  
9 configuration from the first artificial disc.

1           40.     The vertebral prosthesis system having interchangeable endplates of  
2 claim 39, wherein the first artificial disc comprises a core between two plates and  
3 wherein one of the two plates is removed prior to being implanted adjacent the first  
4 endplate.

1           41.     The vertebral prosthesis system having interchangeable endplates of  
2 claim 39, wherein the first endplate and the shaft are adapted to be screwed onto one  
3 another.

1           42.     The vertebral prosthesis system having interchangeable endplates of  
2 claim 39, further comprising a pedicle screw retainer coupled at least one of the shaft,  
3 the first endplate, and the second endplate.

1           43.     The vertebral prosthesis system having interchangeable endplates of  
2 claim 39, wherein the shaft is at least partially constructed of a mesh.

1           44.    A method of replacing a vertebral body and at least one adjacent spinal  
2 disc, comprising:  
3                   opening an aperture in a patient to permit access to a vertebral body to  
4 be replaced;  
5                   removing at least a portion of the vertebral body;  
6                   removing a spinal disc located adjacent the vertebral body;  
7                   selecting a vertebral prosthesis to be implanted into the space created  
8 by the removal of the vertebral body and the spinal disc;  
9                   selecting an artificial disc to be implanted between the vertebral  
10 prosthesis and an adjacent vertebra;  
11                  coupling the vertebral prosthesis to the artificial disc;  
12                  coupling the artificial disc to the adjacent vertebra; and  
13                  closing the aperture.

1           45.    The method of replacing a vertebral body and at least one adjacent  
2 spinal disc of claim 44, further comprising coupling a pedicle screw support to the  
3 vertebral prosthesis and attaching at least one pedicle screw between the pedicle  
4 screw support and a pedicle.

1           46.    The method of replacing a vertebral body and at least one adjacent  
2 spinal disc of claim 44, further comprising adjusting the height of the vertebral  
3 prosthesis.

1           47.    The method of replacing a vertebral body and at least one adjacent  
2 spinal disc of claim 44, further comprising removing an endplate from the artificial  
3 disc before coupling the artificial disc to the vertebral prosthesis.

1           48.    The method of replacing a vertebral body and at least one adjacent  
2 spinal disc of claim 44, further comprising packing bone graft or other bone growth  
3 promoting materials around the vertebral body.

- 1           49.    The method of replacing a vertebral body and at least one adjacent
- 2    spinal disc of claim 44, further comprising selecting an appropriate vertebral
- 3    prosthesis endplate and attaching the endplate to the vertebral prosthesis.